

WHAT IS CLAIMED IS:

1. A process for preparing a fluorine-containing polymer latex which comprises emulsion-polymerizing a fluorine-containing olefin
5 solely or a fluorine-containing olefin and other monomer in an aqueous medium in the presence of at least one of fluorine-containing surfactants represented by the formula (I):



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wherein X is fluorine atom or a linear or branched lower perfluoroalkyl group; -COOM is a carboxylic acid salt; m is an integer of from 3 to 10; n is 0, 1 or 2.

- 15 2. The preparation process of Claim 1, wherein said carboxylic acid salt represented by -COOM is an alkali metal salt, ammonium salt or lower alkylamine salt.

- 20 3. The preparation process of Claim 1, wherein said fluorine-containing olefin is tetrafluoroethylene, hexafluoropropylene and/or perfluoro(alkyl vinyl ether), and an obtained fluorine-containing polymer is a tetrafluoroethylene copolymer.

- 25 4. The preparation process of Claim 3, wherein the emulsion-polymerization is initiated by adding at least one of the fluorine-containing surfactants of Claim 1 in an amount of from 0.001 to 5.0 % by weight based on the aqueous medium at initiating the

polymerization.

5 5. The preparation process of Claim 1, wherein said fluorine-containing olefin is a monomer mixture of two or more of vinylidene fluoride, tetrafluoroethylene, hexafluoropropylene, chlorotrifluoroethylene and perfluoro(alkyl vinyl ether), and an obtained fluorine-containing copolymer is a fluoro elastomer.

10 6. The preparation process of Claim 5, wherein the emulsion-polymerization is initiated by adding at least one of the fluorine-containing surfactants of Claim 1 in an amount of from 0.001 to 20.0 % by weight based on the aqueous medium at initiating the polymerization.

15 7. The preparation process of Claim 1, wherein said fluorine-containing olefin is tetrafluoroethylene, and an obtained fluorine-containing polymer is polytetrafluoroethylene.

20 8. The preparation process of Claim 7, wherein the emulsion-polymerization is initiated by adding at least one of the fluorine-containing surfactants of Claim 1 in an amount of from 0.001 to 0.5 % by weight based on the aqueous medium at initiating the polymerization.

25 9. A fluorine-containing polymer powder obtained by coagulating or agglomerating fluorine-containing polymer particles from a fluorine-containing polymer latex obtained by the preparation process

of Claim 1.

10. An aqueous dispersion of fluorine-containing polymer
obtained by subjecting the fluorine-containing polymer latex obtained by
5 the preparation process of Claim 1 to concentrating or dispersion
stabilizing treatment.